

REMARKS

Claims 1-19 are pending in the application and stand rejected. Claims 1 and 9 have been amended. Claim 2 has been canceled. In view of the above amendments and following remarks, reconsideration and allowance of Claims 1 and 3-19 are respectfully requested.

The Rejection of Claims 1, 6-8, and 17-19 Under 35 U.S.C. § 102(b)/103(a)

Claims 1, 6-8, and 17-19 stand rejected under 35 U.S.C. § 102(b)/103(a) as anticipated by or, in the alternative, as obvious over U.S. Patent No. 5,562,740, issued to Cook et al., as evidenced by Farr et al. Withdrawal of the rejection is requested for the following reasons.

As amended, Claim 1 recites individualized, dyed crosslinked cellulosic pulp fibers. The product fibers are dyed crosslinked cellulosic pulp fibers that have been treated with a bleaching agent. The product fibers have a Whiteness Index greater than crosslinked fibers that have been treated with a bleaching agent and not treated with a dye. See amended Claim 1.

Claims 6-8 depend from Claim 1. Claim 17 relates to an absorbent product comprising the fibers of Claim 1. Claims 18 and 19 depend from Claim 17.

The Cook reference fails to exactly describe the invention as now claimed and therefore is not anticipatory. The Cook reference describes bleaching citric acid crosslinked fibers using hydrogen peroxide and sodium hydroxide. The Cook reference does not disclose fibers that have been treated with a dye.

The Examiner has construed the previously pending Claim 1 as a product-by-process claim. The Examiner states that even though product-by-process claims are limited and defined by the process, patentability of the product depends on the product itself and not the process. Applicants agree with the Examiner's interpretation of the patentability of product-by-process claims. The Examiner concludes that, because the previously claimed product is the same as the

product described by the Cook reference, the claimed product is not patentable in view of the Cook reference.

As noted above, Claim 1 has been amended. As amended, the claimed product relates to dyed crosslinked cellulosic pulp fibers that have been treated with a bleaching agent. Because the Cook reference does not describe dyed crosslinked fibers, the reference is not anticipatory.

As amended, Claim 1 further recites that the product fibers have a Whiteness Index greater than crosslinked fibers that have been treated with a bleaching agent and not treated with a dye. The fibers produced by the process described in the Cook reference have a whiteness affected by treatment with a bleaching agent alone. The claimed fibers are distinguished from those of the Cook reference as having a whiteness greater than fibers treated only with a bleaching agent (e.g., those produced by the method described in the Cook reference). The claimed fibers are dyed fibers that are treated with a bleaching agent. Because the Cook reference does not describe fibers having a Whiteness Index greater than crosslinked fibers that have been treated with a bleaching agent and not treated with a dye, the reference is not anticipatory.

In view of the amendment to Claim 1, withdrawal of the Section 102 rejection is requested.

The cited references do not render obvious the invention as now claimed. The Examiner's Section 103 rejection is based on the premise that the claimed invention provides fibers produced by treatment with a whitening agent (i.e., one or more dyes) and a bleaching agent. The Examiner states that both bleaching and the addition of blue dyes are known to counteract yellowing and to whiten fibers. The Examiner concludes that it is obvious to combine two processes, bleaching and addition of a blue dye whitening agent, because each is known in the art to be useful for whitening cellulosic fibers.

Although applicants agree that it is *prima facie* obvious to combine two compositions or processes, each of which is known to be useful for the same purpose, in order to arrive at a third composition or process to be used for the very same purpose, applicants submit that the *prima facie* case of obviousness fails here because the prior art teaches away from the specific combination.

The claimed product is fibers treated with both a dye and a bleaching agent. Applicants submit that one of skill in the art would not be motivated to combine a dye with a bleaching agent to improve the whiteness of product fibers because, although each is separately known to improve whiteness, the prior art teaches that bleaching counteracts any positive affect on fiber whiteness achieved by previously treatment with a dye.

Bleaching agents are detrimental to dyes and bleaching acts to destroy colorants. As correctly noted by the Examiner, the Farr reference teaches that a bleaching agent whitens a substrate by chemical reaction. Farr states that

bleaching reactions usually involve oxidative or reductive processes that degrade color systems. These processes may involve the destruction or modification of chromophoric groups in the substrate as well as the degradation of color bodies into smaller, more soluble units that are more easily removed in the bleaching process.

When a substrate, such as a fiber that includes a colorant, is subject to a bleaching reaction, the skilled person would expect degradation of the colorant. A dye (or colorant) is a chromophoric material that, like other chromophoric materials native to cellulose fibers, is subject to degradation and destruction by bleaching. Bleaching works by degrading and removing color systems by chemical reactions that destroy the colorant. Knowing this, applicants submit that the skilled person would not be motivated to add a colorant (i.e., a dye) to fibers only to subsequently degrade and/or destroy the colorant by treatment with a bleaching agent.

Because the skilled person would not be motivated to make the combination suggested by the Examiner, applicants respectfully submit the prima facie case of obviousness is untenable. Withdrawal of the rejection is requested.

To illustrate the unpredicted results achieved by the claimed invention, applicants refer the Examiner to Table 1 at page 14 of the specification as filed. The table summarizes the effect of blue dye and bleach on crosslinked fiber whiteness. The data evidences that (1) the claimed fibers have improved whiteness compared to untreated fibers (compare entry 1, no dye and no bleaching, with entries 4, 6, 8, or 10, dye and bleaching); (2) the claimed fibers have improved whiteness compared to bleached fibers (compare entry 2, no dye and bleaching, with entries 4, 6, 8, or 10, dye and bleaching); and (3) the claimed fibers have improved whiteness compared to dyed fibers (compare entries 3, 5, 7, and 9, dye and no bleaching, with entries 4, 6, 8, or 10, dye and bleaching). Contrary to the teaching of the prior art, the fibers of the claimed invention, which are dyed and then bleached (see entries 4, 6, 8, and 10), have increased whiteness compared to bleached fibers and, most importantly, have increased whiteness compared to dyed fibers. The claimed fibers, produced by bleaching dyed fibers, unpredictably have increased whiteness compared to dyed fibers. Unpredictably, bleaching does not negatively affect the whiteness of dyed fibers.

Because the cited references fail to teach, suggest, provide any motivation to make, or otherwise render obvious the invention as now claimed, the claimed invention is nonobvious and patentable over the cited reference.

The Rejection of Claims 1-3, 6-10, and 13-19 Under 35 U.S.C. § 103(a)

Claims 1-3, 6-10, and 13-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,562,740, issued to Cook et al., in view of the Casey and

Biermann references, and further in view of U.S. Patent No. 6,300,259, issued to Westland et al. Withdrawal of the rejection is requested for the following reasons.

As noted above, Claim 1 has been amended. Claims 2, 3, and 6-8 depend from Claim 1.

Claim 9 relates to a method for making whitened crosslinked cellulosic fluff pulp fibers. Claims 10 and 13-16 depend from Claim 9. Claim 9 has been amended to clarify the invention.

Claims 17-19 relate to an absorbent product comprising the fibers of Claim 1.

For the reasons set forth above with regard to the Section 102/103 rejections of Claims 1, 16-8, and 17-19, in view of the Cook reference, applicants submit that the claimed inventions are nonobvious of the cited references. The teachings of the cited references do not cure the lack of motivation to provide product fibers by bleaching dyed fibers. Without a teaching, suggestion, or motivation to make the combination (dye and bleaching agent) suggested by the Examiner, the Section 103 rejection is improper.

Because the cited references, either alone or in any combination, fail to teach, suggest, provide any motivation to make, or otherwise render obvious the claimed inventions, the claimed inventions are nonobvious and patentable over the cited references.

The Rejection of Claims 4, 5, 11, and 12 Under 35 U.S.C. § 103(a)

Claims 4, 5, 11, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Cook, Casey, Biermann, and Westland references as applied to Claims 1-3 and 9-11 above, and further in view of the Chudgar reference and U.S. Patent No. 5,512,064, issued to von der Eltz et al. Withdrawal of the rejection is requested for the following reasons.

Claims 4 and 5 depend from Claim 1, and Claims 11 and 12 depend from Claim 9. For the reasons stated above, the teachings of the Cook, Casey, Biermann, and Westland references fail to teach, suggest, provide any motivation to make, or otherwise render obvious the invention of Claims 1 and 9. The teachings of the Chudgar and von der Eltz references fail to cure the

deficiencies of the teachings of the Cook, Casey, Biermann, and Westland references noted above.

Because the teachings of the cited references, either alone or in any combination, fail to teach, suggest, provide any motivation to make, or otherwise render obvious the invention as now claimed, the claimed invention is nonobvious and patentable over the cited references. Withdrawal of this ground for rejection is respectfully requested.

The Provisional Double Patenting Rejection

Claims 1-19 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-14 of co-pending U.S. Application No. 10/815,159, in view of the Cook and Farr et al. references. Applicants will file a Terminal Disclaimer on an indication of allowed subject matter.

The Double Patenting Rejection of Claims 1-3 and 6

Claims 1-3 and 6 stand rejected on the ground of obviousness-type double patenting as being unpatentable over Claims 1, 3, 6, and 7 of U.S. Patent No. 6,893,473, issued to Neogi et al., in view of the Cook and Farr references. Enclosed herewith is a Terminal Disclaimer obviating this grounds for rejection.

///

///

///

///

///

///

///

///

CONCLUSION

In view of the above amendments and foregoing remarks, applicants believe that Claims 1 and 3-19 are in condition for allowance. If any issues remain that may be expeditiously addressed in a telephone interview, the Examiner is encouraged to telephone applicants' attorney at 206.695.1755.

Respectfully submitted,

CHRISTENSEN O'CONNOR
JOHNSON KINDNESS^{PLLC}



George E. Renzoni, Ph.D.
Registration No. 37,919
Direct Dial No. 206.695.1755

GER:md

LAW OFFICES OF
CHRISTENSEN O'CONNOR JOHNSON KINDNESS^{PLLC}
1420 Fifth Avenue
Suite 2800
Seattle, Washington 98101
206.682.8100